



Smart Integrated Lower Limb (SILL)



- SILL combines robotics, titanium parts and microprocessors with possible capacity for learning
- Advanced technologies will create superior prosthetic:
 - Simulation of human gait with knee, ankle and possible foot functions
 - Potential variations for running vs. walking
 - Variable geometry socket to adapt to changing stump dimensions
 - Above-knee and below-knee versions of SILL
- SILL will significantly improve gait, health and quality of life for land mine survivors and other new amputees
 - Reduced maintenance of prosthetic
 - Reduced medical and health care costs
 - Improved alignment will reduce pain and enable faster rehabilitation
- Project goal to build self-sufficient core capability in prosthetics at VNIITF—creating the largest known prosthetics research facility



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